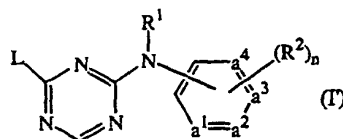


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Claims.

1. A compound of formula



a *N*-oxide, an addition salt, a quaternary amine or a stereochemically isomeric form thereof, wherein

$-a^1=a^2-a^3=a^4-$  represents a bivalent radical of formula

$-\text{CH}=\text{CH}-\text{CH}=\text{CH}-$  (a-1);

$-\text{N}=\text{CH}-\text{CH}=\text{CH}-$  (a-2);

$-\text{N}=\text{CH}-\text{N}=\text{CH}-$  (a-3);

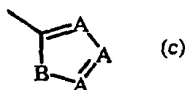
10  $-\text{N}=\text{CH}-\text{CH}=\text{N}-$  (a-4);

$-\text{N}=\text{N}-\text{CH}=\text{CH}-$  (a-5);

*n* is 0, 1, 2, 3 or 4; and in case  $-a^1=a^2-a^3=a^4-$  is (a-1), then *n* may also be 5;

*R*<sup>1</sup> is hydrogen, aryl, formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxycarbonyl, C<sub>1-6</sub>alkyl substituted with formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyloxycarbonyl; and

15 each *R*<sup>2</sup> independently is hydroxy, halo, C<sub>1-6</sub>alkyl optionally substituted with cyano or  $-\text{C}(=\text{O})\text{R}^4$ , C<sub>3-7</sub>cycloalkyl, C<sub>2-6</sub>alkenyl optionally substituted with one or more halogen atoms or cyano, C<sub>2-6</sub>alkynyl optionally substituted with one or more halogen atoms or cyano, C<sub>1-6</sub>alkyloxy, C<sub>1-6</sub>alkyloxycarbonyl, carboxyl, cyano, nitro, amino, mono- or di(C<sub>1-6</sub>alkyl)amino, polyhalomethyl, polyhalomethyloxy, polyhalomethylthio,  $-\text{S}(=\text{O})_p\text{R}^4$ ,  $-\text{NH}-\text{S}(=\text{O})_p\text{R}^4$ ,  $-\text{C}(=\text{O})\text{R}^4$ ,  $-\text{NHC}(=\text{O})\text{H}$ , 20  $-\text{C}(=\text{O})\text{NHNH}_2$ ,  $-\text{NHC}(=\text{O})\text{R}^4$ ,  $-\text{C}(=\text{NH})\text{R}^4$  or a radical of formula



wherein each A independently is N, CH or CR<sup>4</sup>;

B is NH, O, S or NR<sup>4</sup>;

25 *p* is 1 or 2; and

*R*<sup>4</sup> is methyl, amino, mono- or dimethylamino or polyhalomethyl;

*L* is C<sub>4-10</sub>alkyl, C<sub>2-10</sub>alkenyl, C<sub>2-10</sub>alkynyl, C<sub>3-7</sub>cycloalkyl, whereby each of said aliphatic group may be substituted with one or two substituents independently selected from

- \* C<sub>3-7</sub>cycloalkyl,
- 30 \* indolyl or isoindolyl, each optionally substituted with one, two, three or four substituents each independently selected from halo, C<sub>1-6</sub>alkyl, hydroxy, C<sub>1-6</sub>alkyloxy, cyano, aminocarbonyl, nitro, amino, polyhalomethyl, polyhalomethyloxy and C<sub>1-6</sub>alkylcarbonyl,

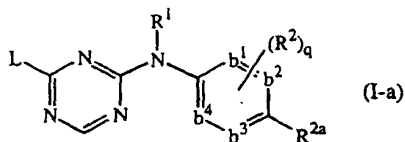
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- \* phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said aromatic rings may optionally be substituted with one, two, three, four or five substituents each independently selected from the substituents defined in  $R^2$ ; or

L is  $-X-R^3$  wherein

- 5  $R^3$  is phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said aromatic rings may optionally be substituted with two, three, four or five substituents each independently selected from the substituents defined in  $R^2$ ; and  
 X is  $-NR^1$ -,  $-NH-NH$ -,  $-N=N$ -,  $-O$ -,  $-C(=O)$ -,  $-CHOH$ -,  $-S$ -,  $-S(=O)$ - or  $-S(=O)_2$ -,  
 aryl is phenyl or phenyl substituted with one, two, three, four or five substituents each  
 10 independently selected from halo,  $C_{1-6}$ alkyl,  $C_{3-7}$ cycloalkyl,  $C_{1-6}$ alkyloxy, cyano, nitro, polyhalo $C_{1-6}$ alkyl and polyhalo $C_{1-6}$ alkyloxy.

2. A compound of formula



- 15 a *N*-oxide, an addition salt, a quaternary amine or a stereochemically isomeric form thereof, wherein

$-b^1=b^2-C(R^{2a})=b^3-b^4=$  represents a bivalent radical of formula

- $-CH=CH-C(R^{2a})=CH-CH=$  (b-1);  
 $-N=CH-C(R^{2a})=CH-CH=$  (b-2);  
 20  $-CH=N-C(R^{2a})=CH-CH=$  (b-3);  
 $-N=CH-C(R^{2a})=N-CH=$  (b-4);  
 $-N=CH-C(R^{2a})=CH-N=$  (b-5);  
 $-CH=N-C(R^{2a})=N-CH=$  (b-6);  
 $-N=N-C(R^{2a})=CH-CH=$  (b-7);

- 25 q is 0, 1, 2; or where possible q is 3 or 4;

$R^1$  is hydrogen, aryl, formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkyl,  $C_{1-6}$ alkyloxycarbonyl,  $C_{1-6}$ alkyl substituted with formyl,  $C_{1-6}$ alkylcarbonyl,  $C_{1-6}$ alkyloxycarbonyl;

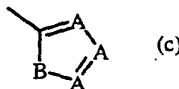
$R^{2a}$  is cyano; aminocarbonyl; mono- or di(methyl)aminocarbonyl;  $C_{1-6}$ alkyl substituted with cyano, aminocarbonyl or mono- or di(methyl)aminocarbonyl;  $C_{2-6}$ alkenyl

- 30 substituted with cyano; or  $C_{2-6}$ alkynyl substituted with cyano;

each  $R^2$  independently is hydroxy, halo,  $C_{1-6}$ alkyl optionally substituted with cyano or  $-C(=O)R^4$ ,  $C_{3-7}$ cycloalkyl,  $C_{2-6}$ alkenyl optionally substituted with one or more halogen atoms or cyano,  $C_{2-6}$ alkynyl optionally substituted with one or more halogen atoms or cyano,  $C_{1-6}$ alkyloxy,  $C_{1-6}$ alkyloxycarbonyl, carboxyl, cyano, nitro, amino,

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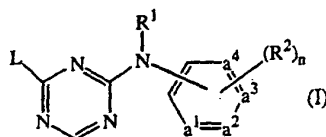
mono- or di(C<sub>1-6</sub>alkyl)amino, polyhalomethyl, polyhalomethoxy, polyhalomethylthio, -S(=O)<sub>p</sub>R<sup>4</sup>, -NH-S(=O)<sub>p</sub>R<sup>4</sup>, -C(=O)R<sup>4</sup>, -NHC(=O)H, -C(=O)NHNH<sub>2</sub>, -NHC(=O)R<sup>4</sup>, -C(=NH)R<sup>4</sup> or a radical of formula



(c)

- 5 wherein each A independently is N, CH or CR<sup>4</sup>;  
 B is NH, O, S or NR<sup>4</sup>;  
 p is 1 or 2; and  
 R<sup>6</sup> is methyl, amino, mono- or dimethylamino or polyhalomethyl;  
 L is C<sub>4-10</sub>alkyl, C<sub>2-10</sub>alkenyl, C<sub>2-10</sub>alkynyl, C<sub>3-7</sub>cycloalkyl, whereby each of said aliphatic  
 10 group may be substituted with one or two substituents independently selected from  
 \* C<sub>3-7</sub>cycloalkyl,  
 \* indolyl or isoindolyl, each optionally substituted with one, two, three or four  
 substituents each independently selected from halo, C<sub>1-6</sub>alkyl, hydroxy,  
 C<sub>1-6</sub>alkyloxy, cyano, aminocarbonyl, nitro, amino, polyhalomethyl,  
 15 polyhalomethoxy and C<sub>1-6</sub>alkylcarbonyl,  
 \* phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said  
 aromatic rings may optionally be substituted with one, two, three, four or five  
 substituents each independently selected from the substituents defined in R<sup>2</sup>; or  
 L is -X-R<sup>3</sup> wherein  
 20 R<sup>3</sup> is phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said  
 aromatic rings may optionally be substituted with two, three, four or five  
 substituents each independently selected from the substituents defined in R<sup>2</sup>; and  
 X is -NR<sup>1</sup>-, -NH-NH-, -N=N-, -O-, -C(=O)-, -CHOH-, -S-, -S(=O)- or -S(=O)<sub>2</sub>-;  
 aryl is phenyl or phenyl substituted with one, two, three, four or five substituents each  
 25 independently selected from halo, C<sub>1-6</sub>alkyl, C<sub>3-7</sub>cycloalkyl, C<sub>1-6</sub>alkyloxy, cyano,  
 nitro, polyhaloC<sub>1-6</sub>alkyl and polyhaloC<sub>1-6</sub>alkyloxy.
3. A compound as claimed in any one of claims 1 and 2 wherein L is -X-R<sup>3</sup>, -X- is -O-  
 or -NH- and R<sup>3</sup> is phenyl substituted with two or three substituents each  
 30 independently selected from chloro, bromo, cyano and methyl.
4. A compound as claimed in claim 2 wherein R<sup>2a</sup> is cyano, aminocarbonyl, mono- or  
 di(methyl)aminocarbonyl, C<sub>1-6</sub>alkyl substituted with cyano, aminocarbonyl or mono-  
 or di(methyl)aminocarbonyl.  
 35
5. The use of a compound of formula

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a *N*-oxide, a pharmaceutically acceptable addition salt, a quaternary amine or a stereochemically isomeric form thereof, wherein

5 -a<sup>1</sup>=a<sup>2</sup>-a<sup>3</sup>=a<sup>4</sup>- represents a bivalent radical of formula

-CH=CH-CH=CH- (a-1);

-N=CH-CH=CH- (a-2);

-N=CH-N=CH- (a-3);

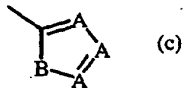
-N=CH-CH=N- (a-4);

10 -N=N-CH=CH- (a-5);

n is 0, 1, 2, 3 or 4; and in case -a<sup>1</sup>=a<sup>2</sup>-a<sup>3</sup>=a<sup>4</sup>- is (a-1), then n may also be 5;

R<sup>1</sup> is hydrogen, aryl, formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyl, C<sub>1-6</sub>alkyloxycarbonyl, C<sub>1-6</sub>alkyl substituted with formyl, C<sub>1-6</sub>alkylcarbonyl, C<sub>1-6</sub>alkyloxycarbonyl; and each R<sup>2</sup> independently is hydroxy, halo, C<sub>1-6</sub>alkyl optionally substituted with cyano or

15 -C(=O)R<sup>4</sup>, C<sub>3-7</sub>cycloalkyl, C<sub>2-6</sub>alkenyl optionally substituted with one or more halogen atoms or cyano, C<sub>2-6</sub>alkynyl optionally substituted with one or more halogen atoms or cyano, C<sub>1-6</sub>alkyloxy, C<sub>1-6</sub>alkyloxycarbonyl, carboxyl, cyano, nitro, amino, mono- or di(C<sub>1-6</sub>alkyl)amino, polyhalomethyl, polyhalomethoxy, polyhalomethylthio, -S(=O)<sub>p</sub>R<sup>4</sup>, -NH-S(=O)<sub>p</sub>R<sup>4</sup>, -C(=O)R<sup>4</sup>, -NHC(=O)H, 20 -C(=O)NHNH<sub>2</sub>, -NHC(=O)R<sup>4</sup>, -C(=NH)R<sup>4</sup> or a radical of formula



wherein each A independently is N, CH or CR<sup>4</sup>;

B is NH, O, S or NR<sup>4</sup>;

p is 1 or 2; and

25 R<sup>4</sup> is methyl, amino, mono- or dimethylamino or polyhalomethyl;

L is C<sub>1-10</sub>alkyl, C<sub>2-10</sub>alkenyl, C<sub>2-10</sub>alkynyl, C<sub>3-7</sub>cycloalkyl, whereby each of said aliphatic group may be substituted with one or two substituents independently selected from

\* C<sub>3-7</sub>cycloalkyl,

\* indolyl or isoindolyl, each optionally substituted with one, two, three or four substituents each independently selected from halo, C<sub>1-6</sub>alkyl, hydroxy, C<sub>1-6</sub>alkyloxy, cyano, aminocarbonyl, nitro, amino, polyhalomethyl, polyhalomethoxy and C<sub>1-6</sub>alkylcarbonyl,

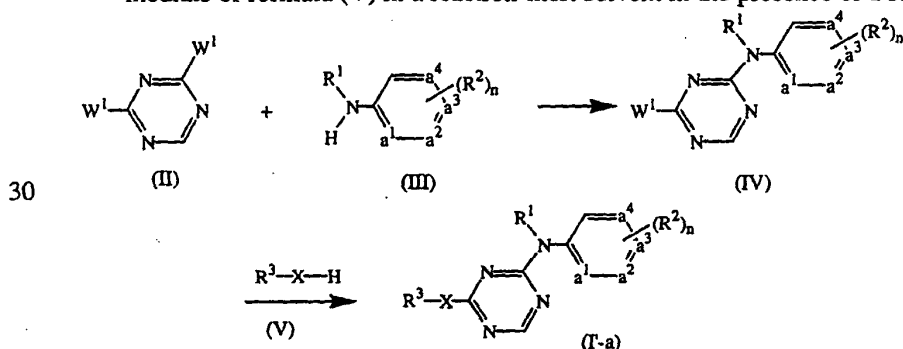
30 \* phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said

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aromatic rings may optionally be substituted with one, two, three, four or five substituents each independently selected from the substituents defined in  $R^2$ ; or  
 L is  $-X-R^3$  wherein

- $R^3$  is phenyl, pyridinyl, pyrimidinyl, pyrazinyl or pyridazinyl, wherein each of said  
 5 aromatic rings may optionally be substituted with one, two, three, four or five  
 substituents each independently selected from the substituents defined in  $R^2$ ; and  
 X is  $-NR^1$ -,  $-NH-NH$ -,  $-N=N$ -,  $-O$ -,  $-C(=O)$ -,  $-CHOH$ -,  $-S$ -,  $-S(=O)$ - or  $-S(=O)_2$ ;  
 aryl is phenyl or phenyl substituted with one, two, three, four or five substituents each  
 independently selected from halo,  $C_{1-6}$ alkyl,  $C_{3-7}$ cycloalkyl,  $C_{1-6}$ alkyloxy, cyano,  
 10 nitro, polyhalo $C_{1-6}$ alkyl and polyhalo $C_{1-6}$ alkyloxy;  
 for the manufacture of a medicine for the treatment of subjects suffering from HIV  
 (Human Immunodeficiency Virus) infection.

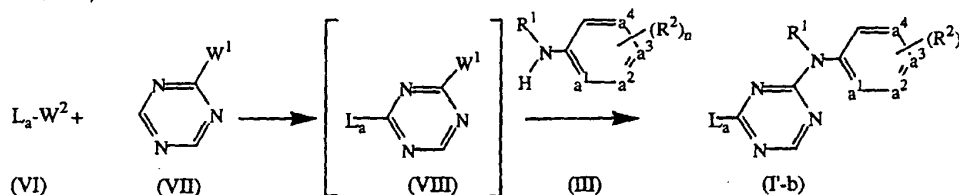
6. A compound as claimed in any one of claims 1 to 4 for use as a medicine.  
 15 7. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and  
 a therapeutically active amount of compound as claimed in any one of claims 1 to 4.  
 8. A process for preparing a pharmaceutical composition as claimed in claim 7  
 20 characterized in that a therapeutically effective amount of a compound as claimed in  
 any one of claims 1 to 4 is intimately mixed with a pharmaceutically acceptable  
 carrier.  
 9. A process for preparing a compound as claimed in any one of claims 1 to 4, or a  
 25 *N*-oxide, an addition salt, a quaternary amine or a stereochemically isomeric form  
 thereof, characterized by  
 a) reacting an intermediate of formula (II) with an amine derivative of formula (III) and  
 subsequently reacting the thus obtained intermediate of formula (IV) with an inter-  
 mediate of formula (V) in a reaction-inert solvent in the presence of a suitable base;



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wherein  $W^1$  is a suitable leaving group and  $R^1$  to  $R^3$ ,  $X$ ,  $n$  and  $-a^1=a^2-a^3=a^4-$  are as defined in claim 1;

- b) reacting an intermediate of formula (VI) with an intermediate of formula (VII) and subsequently reacting the thus obtained intermediate of formula (VIII) with an amine derivative of formula (III) in a reaction-inert solvent in the presence of a suitable base;



- wherein  $W^1, W^2$  are suitable leaving groups,  $L_a$  is an optionally substituted  $C_{1-10}$ alkyl,  $C_{2-10}$ alkenyl,  $C_{2-10}$ alkynyl,  $C_{3-7}$ cycloalkyl and  $R^1, R^2, n$  and  $-a^1=a^2-a^3=a^4-$  are as defined in claim 1;
- or if desired, converting compounds of formula (I') into each other following art-known transformations, and further, if desired, converting compounds of formula (I') into a therapeutically active non-toxic acid addition salt by treatment with an acid, or into a therapeutically active non-toxic base addition salt by treatment with a base, or conversely, converting the acid addition salt form into the free base by treatment with alkali, or converting the base addition salt into the free acid by treatment with acid; and, if desired, preparing stereochemically isomeric forms or *N*-oxides thereof.
10. The combination of a compound as defined in any one of claims 1 to 5 and another antiretroviral compound.
  11. A combination as claimed in claim 10 for use as a medicine.
  12. A product containing (a) a compound as defined in any one of claims 1 to 5, and (b) another antiretroviral compound, as a combined preparation for simultaneous, separate or sequential use in anti-HIV treatment.
  13. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and as active ingredients (a) a compound as defined in any one of claims 1 to 5, and (b) another antiretroviral compound.